

IN THE CLAIMS

1. (previously presented) In a controllable gastric band including a nonextensible back and a first chamber arranged to be on a stoma side of the back for controlling stoma restriction by supplying and discharging liquid to and from the first chamber, the improvements in that

a second chamber is provided on the stoma side of the back, the second chamber communicating with the first chamber in a manner to ensure the controlling of the stoma restriction by a displacement of the liquid between the first and second chambers.

2. (previously presented) In a controllable gastric band including a nonextensible back and a first chamber arranged to be on a stomach or esophagus side of the back for controlling restriction of the stomach or esophagus by supplying and discharging liquid to and from the first chamber, the improvements in that

a second chamber is provided on the stomach or esophagus side of the back, the second chamber being a sensor for detection of a pressure increase in the stomach or esophagus, and

the first chamber is connected via the second chamber with a reservoir in a manner to control the restriction by displacement of the liquid between the reservoir and the first chamber as a function of the detected pressure.

3. (previously presented) A gastric band according to claim 1, characterized in that the chambers are arranged one beside the other for the first chamber to be located aborally.

4. (previously presented) A gastric band according to claim 3, characterized in that the second chamber is subdivided into two communicating chambers delimiting the first chamber on either side.

5. (previously presented) A gastric band according to claim 2, characterized in that the first chamber and the second chamber are arranged one above the other in respect to the stomach or esophagus for the second chamber to be on the gastric wall .

6. (previously presented) A gastric band according to claim 5, characterized in that a layer is provided between the chambers.

7. (previously presented) A gastric band according to claim 2, characterized in that a pumping device for pumping the liquid from the second chamber or the reservoir into the first chamber and vice versa is provided.

8. (previously presented) A gastric band according to claim 7, characterized in that the pumping device is comprised of an electric pump .

9. (previously presented) A gastric band according to claim 7, characterized in that the pumping device is at least one of a mechanically driven pump or a lift-and-force pump .
10. (previously presented) A gastric band according to claim 1, characterized in that a detection device for detecting an eating activity is provided.
11. (previously presented) A gastric band according to claim 10, characterized in that the detection device is comprised of a device for detecting a deglutition activity.
12. (previously presented) A gastric band according to claim 10, characterized in that the detection device is comprised of a device for detecting the pressure prevailing at the gastric wall or wall of the esophagus.
13. (previously presented) A gastric band according to claim 12, characterized in that a pressure sensor is provided in the second chamber to detect the pressure prevailing at the gastric wall or wall of the esophagus, said pressure sensor being connected with an electronic circuit.
14. (previously presented) A gastric band according to claim 10, characterized in that the detection device is comprised of a device for detecting a peristaltic wave.

15. (previously presented) A gastric band according to claim 7, characterized in that a detection device is connected with the pumping device in a manner that, after detecting an eating activity, the liquid is pumped from the second chamber or reservoir into the first chamber and the liquid is again returned from the first chamber into the second chamber or reservoir at a given time after the detecting of the eating activity has stopped.

16. (previously presented) A gastric band according to claim 1, characterized in that the communicating of the chambers comprises a connection with each other via an auxiliary chamber, wherein

a valve between the second chamber and the auxiliary chamber, the valve allows transport of the liquid only from the second chamber to the auxiliary chamber, and

a further valve between the auxiliary chamber and the first chamber allows transport of the liquid only from the auxiliary chamber to the first chamber.

17. (previously presented) A gastric band according to claim 2, characterized in that an auxiliary chamber functioning as an air chamber is arranged between the reservoir and the first chamber.

18. (previously presented) A gastric band according to claim 2, characterized in that a device for carrying out a liquid exchange from the first chamber to the second chamber or reservoir, respectively, is provided between the first chamber and the second chamber or reservoir, respectively.

19. (previously presented) A gastric band according to claim 18, characterized in that the device for carrying out the liquid exchange is comprised of a common partition wall containing micropores and arranged between the chambers or between the first chamber and the reservoir, respectively.

20. (previously presented) A gastric band according to claim 18, characterized in that the device for carrying out the liquid exchange is comprised of a backflow channel arranged between the chambers or the first chamber and the reservoir, respectively.

21. (previously presented) A gastric band according to claim 20, characterized in that a throttle valve is arranged within the backflow channel .

22. (previously presented) A gastric band according to claim 2, characterized in that the first chamber is connected to a stomach pacemaker or a device emitting electric pulses so as to obtain, via appropriately placed probes, a stimulation of the gastric wall by electric pulses as a function of the pressure prevailing in the stomach or esophagus and detected by the first chamber.

23. (previously presented) A gastric band according to claim 1, characterized in that a further liquid-filled chamber is provided for the adaptation of the gastric band.

24. (previously presented) A gastric band according to claim 23, characterized in that said further chamber is connected with a port to be subcutaneously arranged in a manner that liquid can be filled into, or removed from, said chamber by supplying or discharging liquid through said port.

25. (new) In a controllable gastric band for a stomach or esophagus, the controllable gastric band including a back (4) and a chamber (2) on one side of the back for arrangement on a stoma side of the back and adjusting restriction of the stoma, the improvements comprising:

a sensor for detecting pressure increase in at least one of the chamber, stomach or esophagus, and

a control for the adjusting of the restriction as a function of the detected pressure increase.